

Dorsal Plating Of Distal Radius Fractures

Frankie Leung

University of Hong Kong, Hong Kong SAR

A volar approach is usually recommended for plating of most types of distal radius fracture. There is better soft-tissue coverage and less tendon irritation. Jakubietz et al have shown that routine volar plating was associated with significantly better range of motion, grip strength and pain, when compared with routine dorsal plating. Despite being technically easier, the surgeon must still be familiar with the proper surgical technique of volar plating, and be mindful of potential complications that may arise, including extensor or even flexor tendon rupture.

A dorsal approach and dorsal plate fixation may be required in some cases when a volar approach alone cannot achieve anatomical articular reduction and stable fixation. A careful CT evaluation of the fracture pattern before surgery is therefore recommended to determine whether a dorsal approach would be necessary. Some surgeons recommend routine removal of dorsal implants due to a higher rate of tendon attrition rupture³⁷ and a more significant improvement in function after dorsal implant removal relative to volar implant removal. However, the smooth edges and low profile design of modern dorsal plates render routine removal unnecessary.

In recent years, a dorsal joint spanning plating technique has also been developed to address complex and highly unstable intra-articular fractures. The plate would then be removed at 6-8 weeks' time for further rehabilitation. This seems to be an alternative to supplementary external fixation in treating these challenging injuries.